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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,348	11/26/2003	Michael Conrad	07781.0117-00000	6160

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EXAMINER

ROBINSON, GRETA LEE

ART UNIT	PAPER NUMBER
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2168

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/721,348

Applicant(s)

CONRAD ET AL.

Examiner

Greta L. Robinson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-20,22-30,32-43 and 45-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-20,22-30,32-43 and 45-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/21/06.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 20070122.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Supplemental DETAILED ACTION

1. Claims 1-7, 9-20, 22-30, 32-43 and 45-58 are pending in the present application.
2. Claims 8, 21, 31 and 44 have been cancelled. Claims 1, 2, 6, 9-13, 15, 18-20, 24, 25, 29, 32-36, 38 and 41-43 have been amended; and new claims 47-58 have been added.

Drawings

3. The drawings were received on September 21, 2006. These drawings are acceptable.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "first data field", "second data field", and "third data field" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

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Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 24, and 56 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, and 9 of copending Application No. 10/721,898. Although the conflicting claims are not identical,

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they are not patentably distinct from each other because it is well settled that the omission of elements and their functioning is an obvious expedient if the remaining elements perform the same function as before. See *In re Karlson*, 136 USPQ 184 (CCPA 1963).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Regarding claim 1, of the present application a method for replicating one or more data objects from a source system to a target system [note: patent application 10/721,898 claim 1 preamble], the method comprising:

creating an electronic data element comprising a first data field and a second data field, wherein the first data field contains data representing an identifier assignable to one or more data objects and the second data field contains data representing a state of the identifier; [note: patent application 10/721,898 claim 1 lines 3-17];

assigning the identifier to the one or more data objects [note: patent application 10/721,898 claim 1 line 18];

processing the one or more data objects in accordance with a software application [note: patent application 10/721,898 claim 1 line 19];

storing the one or more data objects in accordance with software application;

changing the state of the identifier in the electronic data element to indicate that the one or more processed data objects are ready to be replicated from the source

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system to the target system [note: patent application 10/721,898 claim 1 lines 20-21];
and

replicating, in response to changing the state of the identifier, the one or more processed data objects from the source system to the target system [note: patent application 10/721,898 claim 1 lines 20-21].

Regarding claim 24, a system for replicating one or more data objects from a source system to a target system, the system comprising: a memory; and a microprocessor ... [note: patent application 10/721,898 claim 5].

Regarding claim 56, a system for replicating one or more data objects from a source system to a target system, the system comprising: means for creating an electronic data element comprising a first data field and a second data field [note patent application 10/721,898 claim 9].

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-7, 9-20, 22-30, 32-43, and 45-58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "creating

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an electronic document" does not appear to be described properly. Note for example paragraph [070] states "a new electronic data element in state I may be created by process 201 by adding a new line with corresponding contents of the respective fields to the table", see also Figure 2 elements 201 "create ID state I" and element 200 table. A line appears to correspond to a row, however the text does not appear to specifically state a first data field and a second data field. The specific field structures do not appear to be specifically depicted or labeled. Note the "states" appear to be created as opposed to the claimed electronic data element see Figure 2 (201) "create ID state I", and Figure 7 (703) "create new ID in state I". There does not appear to be any type of creation of a structure, but rather manipulation of values (i.e. state parameters) for corresponding identifiers.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-7, 9-20, 22-30, 32-43, and 45-58 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: exclusive lock and blocking for replication see paragraph [081], Figure 2 elements 205 and 206, figures 3 and 4.

Claim Rejections - 35 USC § 102

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12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-5, 22-28, 45, 46 and 56-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Holenstein et al. US Patent Application Publication No. 2002/0133507 A1.

Regarding claim 1, Holenstein et al. teaches a method for replicating one or more data objects from a source system to a target system [note: paragraph 0022 “the scope of the invention includes schemes where replication occurs between more than two databases”; paragraph 0023 “Replication-duplicating the contents of at least a portion of data records held in a source database to a target database”], the method comprising:

creating an electronic data element comprising a first data field and a second data field, wherein the first data field contains data representing an identifier assignable to one or more data objects and the second data field contains data representing a state of the identifier; [note: paragraph 0029 “a database as defined comprises at least one table or file of data ...wherein the data is typically arranged in records called rows”; paragraph 0041–0047 note eliminating or adding columns or rows in a target, changing the type, structure or length of a field];

assigning the identifier to the one or more data objects [note: paragraph 0103 paragraph 0101-0103, paragraph 0124 –0126; paragraph 0164 the key is defined as one or more fields; paragraphs 0165 through 0181];

processing the one or more data objects in accordance with a software application [note: paragraphs 0164-0181];

storing the one or more data objects in accordance with software application [note: paragraphs 0164-0181];

changing the state of the identifier in the electronic data element to indicate that the one or more processed data objects are ready to be replicated from the source system to the target system [note: paragraphs 0164-0181]; and

replicating, in response to changing the state of the identifier, the one or more processed data objects from the source system to the target system [note: abstract; paragraphs 0023 and 0096; paragraphs 0164-0181; Figure 4].

14. Regarding claim 2, wherein the second data field is configured to store one of: a) a first state, in which said electronic data element may be accessed by one or more data object processing operations and whereby said identifier is assignable to one or more data objects, b) a second state, in which said electronic data element may not be accessed by one or more data object processing operations and whereby said identifier is assignable to one or more data objects, or c) a third state, in which said electronic data element may not be accessed by one or more data object processing operations and whereby said identifier is not assignable to one or more data objects [note: Holstein

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et al. teaches various schemes may be implemented or defined see paragraph 0052, 0061, paragraphs 0136-0141, also paragraph 0164].

15. Regarding claim 3, wherein the first data field and the second data field are in a table [note: Figure 2A (14); Figure 3; Figure 4].

16. Regarding claim 4, wherein the first data field is in a first table and the second data field in a second table [note: paragraph 0100-0105, Figure 2A; Figure 3].

17. Regarding claim 5, wherein the electronic data element is implemented in object oriented programming as an instance of a class [note: paragraphs 0006, 0027, 0052-0060, and 0069].

18. Regarding claims 22-23, comprises a globally unique identifier ...time stamp [note: paragraph 0007 global coordinator; Figure 3 and Figure 8].

19. The limitations of system claims 24-28, 45-46, and 56 parallel method claims 1-5 and 22-23 therefore they are rejected under the same rationale.

20. Regarding claims 57 and 58, "wherein the software application is a business application ... enterprise resource planning software application" [see: paragraphs 0006, 0027, 0052-0060, and 0069].

Response to Arguments

21. Applicant's arguments with respect to claims 1-7, 9-20, 22-30, 32-43 and 45-58 have been considered but are moot in view of the new ground(s) of rejection.

In the response Applicant argued the following:

- Figures 1, 2 and 7 depict a table having a first data field configured to store an "ID" value, a second data field configured to store a state value (e.g. state I, II, or III), and a third data field configured to store a default indicator. In response to Applicants argument the examiner respectfully maintains the drawing objection. The table only depicts rows and columns, the drawings do not specifically illustrate the boundaries or structure of the fields (i.e. first data field, second data field, and third data field). The examiner requests that the specific structure of a field be shown and labeled for clarity.
- In response to the rejection cited under 35 USC 112 first paragraph, Applicant cited various portions of the specification for support for the limitation "creating an electronic data element", however the disclosure appears to describe that an ID state is created rather than an electronic data element, note citations supra.
- Applicants amendment and arguments concerning the rejections cited under 35 USC 112 second paragraph, 35 USC 101, and 35 USC 103(a) concerning Lunceford et al. in view of Suver were found convincing, however an updated search concludes new grounds of rejection under 35 USC 102(e) and provisional obviousness-type double patenting.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Calbucci US Patent 6,895,512 B1

Shinkai et al. US Patent Application Publication No. 2001/0039548 A1

Shakib et al. US Patent 5,812,793

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

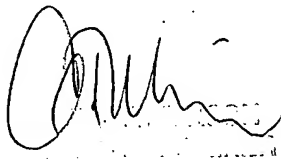
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greta L. Robinson whose telephone number is (571)272-4118. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Greta Robinson
Primary Examiner
January 22, 2007